

IN THE CLAIMS

1. (Currently amended) A fully vulcanized thermoplastic elastomer, comprising a rubber phase and a plastic matrix, characterized in that the wherein an average particle size of the rubber phase of said fully vulcanized thermoplastic elastomer is $0.02\mu\sim1\mu$.
2. (Currently amended) A fully vulcanized thermoplastic elastomer, comprising a rubber phase and a plastic matrix, characterized in that the wherein a shape of the rubber phase of said fully vulcanized thermoplastic elastomer is spheroidic.
3. (Currently amended) The fully vulcanized thermoplastic elastomer according to claim 2, characterized in that wherein the average particle size of the rubber phase of said fully vulcanized thermoplastic elastomer is $0.02\mu\sim1\mu$.
4. (Currently amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that wherein the average particle size of said rubber phase is $0.05\mu\sim0.5\mu$, more preferably $0.05\mu\sim0.2\mu$.
5. (Currently amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that wherein the weight ratio of the rubber phase to the plastic matrix is 30:70 to 75:25, preferably 50:50 to 75:25.
6. (Currently amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that wherein said rubber phase has a gel content of at least 60% by weight, preferably at least 75% by weight.

7. (Currently amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that wherein the plastic matrix of said fully vulcanized thermoplastic elastomer comprises at least one polymer or copolymer thereof selected from the group consisting of polyamide, polypropylene, polyethylene, polyvinyl chloride, polyurethane, polyester, polycarbonate, polyoxymethylene, polystyrene, polyphenylene oxide, polyphenylene sulfide, polyimide and polysulfone.

8. (Currently amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that wherein the rubber phase of said fully vulcanized thermoplastic elastomer comprises at least one rubber selected from the group consisting of natural rubber, styrene-butadiene rubber, carboxylated styrene-butadiene rubber, nitrile rubber, carboxylated nitrile rubber, polybutadiene rubber, chloroprene rubber, silicone rubber, acrylic rubber, styrene-butadiene-vinylpyridine rubber, isoprene rubber, butyl rubber, ethylene-propylene rubber, polysulfide rubber, acrylic-butadiene rubber, polyurethane rubber, and fluorine rubber.

9. (Currently amended) A process for preparing a fully vulcanized thermoplastic elastomer, which comprises the step of blending fully vulcanized powdery rubber with plastic, wherein the weight ratio of fully vulcanized powdery rubber to plastic is 30:70 to 75:25.

10. (Currently amended) The process according to claim 9, wherein characterized in that the weight ratio of fully vulcanized powdery rubber to plastic is 30:70 to 75:25, preferably 50:50 to 75:25.

11. (Currently amended) The process according to claim 9, characterized in that wherein

the average particle size of the fully vulcanized powdery rubber is $0.02\mu\sim1\mu$.

12. (Currently amended) The process according to claim 9, characterized in that wherein the shape of the fully vulcanized powdery rubber is spheroidic.

13. (Currently amended) The process according to claim 12, characterized in that wherein the average particle size of the fully vulcanized powdery rubber is $0.02\mu\sim1\mu$.

14. (Currently amended) The process according to claim 9, characterized in that wherein the average particle size of the fully vulcanized powdery rubber is $0.05\mu\sim0.5\mu$, preferably $0.05\mu\sim0.2\mu$.

15. (Currently amended) The process according to claim 9, characterized in that wherein said fully vulcanized powdery rubber comprises at least one rubber selected from the group consisting of fully vulcanized powdery natural rubber, fully vulcanized powdery styrene-butadiene rubber, fully vulcanized powdery carboxylated styrene-butadiene rubber, fully vulcanized powdery nitrile rubber, fully vulcanized powdery carboxylated nitrile rubber, fully vulcanized powdery polybutadiene rubber, fully vulcanized powdery chloroprene rubber, fully vulcanized powdery silicone rubber, fully vulcanized powdery acrylic rubber, fully vulcanized powdery styrene-butadiene-vinylpyridine rubber, fully vulcanized powdery isoprene rubber, fully vulcanized powdery butyl rubber, fully vulcanized powdery ethylene-propylene rubber, fully vulcanized powdery polysulfide rubber, fully vulcanized powdery acrylic-butadiene rubber, fully vulcanized powdery polyurethane rubber, and fully vulcanized powdery fluorine rubber.

16. (Currently amended) The process according to claim 9, characterized in that wherein

said plastic comprises at least one polymer or copolymer thereof selected from the group consist of polyamide, polypropylene, polyethylene, polyvinyl chloride, polyurethane, polyester, polycarbonate, polyoxymethylene, polystyrene, polyphenylene oxide, polyphenylene sulfide, polyimide and polysulfone.

17. (Cancelled).

18. (Previously Presented) A method comprising preparing a moulded article with the vulcanized thermoplastic elastomer of claim 1.

19. (New) The fully vulcanized thermoplastic elastomer according to claim 4, wherein the average particle size of said rubber phase is 0.05μ - 0.2μ .

20. (New) The fully vulcanized thermoplastic elastomer according to claim 5, wherein the weight ratio of the rubber phase to the plastic matrix is 50:50 to 75:25.

21. (New) The fully vulcanized thermoplastic elastomer according to claim 6, wherein the rubber phase has a gel content of at least 75% by weight.

22. (New) The process according to claim 14, wherein the average particle size of the fully vulcanized powdery rubber is 0.05μ - 0.2μ .